

DISCUSSION

Trend Study No. 50B-8

*** This site was not read in 1998 and is being discontinued. Only text from the 1992 "Utah Big Game Range Trend Studies" report has been included. Consult the 1992 report for maps and data tables.

The Oak Spring trend study samples deer winter range southwest of Oak Springs on Iron Mountain. The study area is within a Utah juniper type on a northeast facing 10%-20% slope at an elevation of 6,520 feet.

Soils are shallow and rocky with a hard pan at several inches below the surface. Tree interspaces are occupied mainly by bare ground or erosion pavement. Like many juniper or pinyon types, this area has a fair aerial vegetative cover, but generally poor basal cover (herbaceous cover), as a result soil loss has occurred with rock and pavement now protecting the soil.

Browse composition consists of both desirable and undesirable species. The more preferred include Stansbury cliffrose, antelope bitterbrush, Wyoming big sagebrush, and true mountain mahogany. These species account for 29% of total browse density. All of the species mentioned are important and should be considered in any management plan. Currently these species are stable and show an increase in amount of hedging. Shrubs of intermediate desirability, which include white rubber rabbitbrush and a shrubby eriogonum, comprised 16% of browse density in 1982. They were not encountered in 1992. The remaining 71% of browse population consists of undesirable species, such as golden pricklypear, broom snakeweed, echinocactus, and an overstory juniper and pinyon. Golden pricklypear has an increased population of nearly 200 plants/acre, but does not appear to be a major threat to the community, although it is abundant. Further increase of this species should be discouraged.

Grasses are sparse and hence are of small importance. Three species, bottlebrush squirreltail, purple three-awn, and muttongrass were sampled.

Forbs are scattered, but more abundant than grasses. Composition consists largely of annuals and low value perennials. Among perennial forbs, mat penstemon is by far the most abundant. Annual forbs are fairly common and the most notable is owllover (Orthocarpus spp.). Utilization of forbs is uniformly light.

1982 APPARENT TREND ASSESSMENT

Soil trend is declining. Protective ground cover is simply inadequate to prevent serious soil loss from high intensity summer storms. Vegetative trend is stable with a low level of production. Browse composition is dominated by undesirable species which, however do not show obvious signs of increase. Wyoming big sagebrush, one of the better shrubs, may be declining. Understory production is negligible. This area could be greatly improved by chaining and seeding.

1992 TREND ASSESSMENT

Soil is still on a downward trend as evidenced by a decrease in bare ground contributing to a corresponding increase in rock and pavement. Vegetative trend is stable and still at a low rate of production and probably always will be if the site is left alone. The most abundant browse species are undesirable and increasing slightly. The Wyoming big sagebrush population is stable but at a very low density.

TREND ASSESSMENT

soil - continuing downward

browse - stable, but key browse is at a very low density

herbaceous understory - stable, but poor with very low numbers